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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,730	10/24/2003	Luc Leenders	224791	2390
23460	7590	08/29/2005	EXAMINER	
LEYDIG VOIT & MAYER, LTD TWO PRUDENTIAL PLAZA, SUITE 4900 180 NORTH STETSON AVENUE CHICAGO, IL 60601-6780			WILLIAMS, KEVIN D	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,730

Applicant(s)

LEENDERS ET AL.

Examiner

Kevin D. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Verschueren (US 6,820,552).

Verschueren teaches a process for the printing of a receiving medium with a functional pattern comprising in any order the steps of applying a printing ink to a printing plate (col. 3, lines 16-20) and wetting said printing plate with an aqueous fountain medium comprising a solution or a dispersion which comprises at least one moiety having at least coloring, pH-indicating, whitening, fluorescent phosphorescent, X-ray phosphor or conductive properties (col. 5, lines 10-25), the moiety being an intrinsically conductive polymer being selected from the group consisting of polyanilines, polyaniline derivatives, polypyrroles, polypyrrole derivatives, polythiophenes and polythiophene derivatives (col. 5, lines 10-25).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 8, 9, 11, 13, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verschueren in view of Louwet (US 6,632,472).

Verschueren teaches the claimed invention except for the conductive polymer being a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge, the fountain medium further comprising a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound being selected from the group consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di (ethylene glycol) ethyl ether acetate, the fountain medium further comprising an aprotic organic compound with a dielectric constant  $\geq 15$  and a non-ionic or anionic surfactant, where the fountain medium contains a dye and/or pigment such that the color tone of the ink and color tone of the aqueous fountain medium cannot be distinguished by the human eye when applied onto a receiving medium, and where the printing ink contains a dye and/or pigment such that the color tone of the ink and the background cannot be distinguished by the human eye.

Louwet teaches a conductive polymer being a polymer or copolymer of a 3,4-dialkoxythiophene in which the two alkoxy groups may be the same or different or together represent an optionally substituted oxy-alkylene-oxy bridge (col. 6, lines 36-44), the fountain medium further containing a di- or polyhydroxy- and/or carboxy groups or amide or lactam group containing organic compound being selected from the group

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consisting of 1,2-propandiol, propylene glycol, diethylene glycol, N-methyl pyrrolidinone and di (ethylene glycol) ethyl ether acetate (col. 12, lines 1-5), the fountain medium further comprising an aprotic organic compound with a dielectric constant  $\geq 15$  (col. 4, lines 30-34) and a non-ionic or anionic surfactant (col. 11, lines 1-3), where the fountain medium contains a dye and/or pigment such that the color tone of the ink and the background cannot be distinguished by the human eye, and where the printing ink contains a dye and/or pigment such that the color tone of the ink and the background cannot be distinguished by the human eye.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Verschueren to have the solution as taught by Louwet, in order to reduce the amount of energy required to dissolve the ingredients as taught by Louwet.

5. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verschueren in view of MacDiarmid (US 2002/0083858).

Verschueren teaches the claimed invention except for the intrinsically conductive polymer being selected from the group consisting of homopolymers of (3,4-methylenedioxy-thiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxythiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylenedioxythiophene) derivatives and copolymers thereof, the fountain medium further containing a polyanion being a poly(styrenesulfonate).

MacDiarmid teaches a printing device having an intrinsically conductive polymer being selected from the group consisting of homopolymers of (3,4-methylenedioxythiophene), (3,4-methylenedioxythiophene) derivatives, (3,4-ethylenedioxythiophene), (3,4-ethylenedioxythiophene) derivatives, (3,4-propylenedioxythiophene), (3,4-propylenedioxythiophene) derivatives, (3,4-butylenedioxythiophene) and (3,4-butylenedioxythiophene) derivatives and copolymers thereof ([0147]), the fountain medium further containing a polyanion being a poly(styrenesulfonate) ([0241]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Verschueren to have the conductive polymer as taught by MacDiarmid, in order to utilize a polymer with increased conductability.

6. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verschueren in view of Louwet as applied to claims 4, 8, 9, 11, 13, 15, and 16 above, and further in view of Domoto (US 6,827,435).

Verschueren in view of Louwet teaches the claimed invention except for heating the receiving medium within 10 minutes after printing to a temperature of 100 to 250°C and to a temperature of  $\leq 150^{\circ}\text{C}$ .

Domoto teaches a printing device having a step subsequent to printing in which a receiving medium within 10 minutes of printing is heated to a temperature of 100 to 250°C and to a temperature of  $\leq 150^{\circ}\text{C}$  (col. 6, lines 30-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention to additionally modify Verschueren to have the heating of the receiving medium as taught by Domoto, in order to prevent the printed images from smearing.

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7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Verschueren in view of Uchida (US 5,163,999).

Verschueren teaches the claimed invention except for the fountain medium having a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

Uchida teaches a fountain medium having a viscosity at 25°C after stirring to constant viscosity of 30 mPa.s as measured according to DIN 53211.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Verschueren to have the fountain medium as taught by Uchida, in order to ensure that the fountain medium is of appropriate viscosity for producing quality print images.

### ***Response to Arguments***

8. Applicant's arguments filed 6/7/2005 have been fully considered but they are not persuasive.

Applicant argues that the coating in Verschueren is not applied to the printing plate. Column 4, lines 50-65 of Verschueren, describe the coating being applied to the base layer or printing plate of the printing device.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (571) 272-2172. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should



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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDW

August 26, 2005

A handwritten signature in black ink, appearing to read "Ren Yan", with a stylized, cursive script.

**REN YAN  
PRIMARY EXAMINER**